VEGAS Pro 22

Introduction to the new features

AI Text-Based Editing

The Speech to Text function has been redesigned and now includes Text-based editing tools. With these tools, you can use the Speech to Text feature to create a transcript of your project video and then edit the transcript—for example, delete a section of text or cut and paste text, etc.—and VEGAS Pro automatically edits the events on your timeline to match the edits you made in the transcript. The opposite is also possible. For instance, if you trim an event on the timeline, VEGAS Pro automatically edits the transcript to match. This workflow can greatly speed up your editing process.

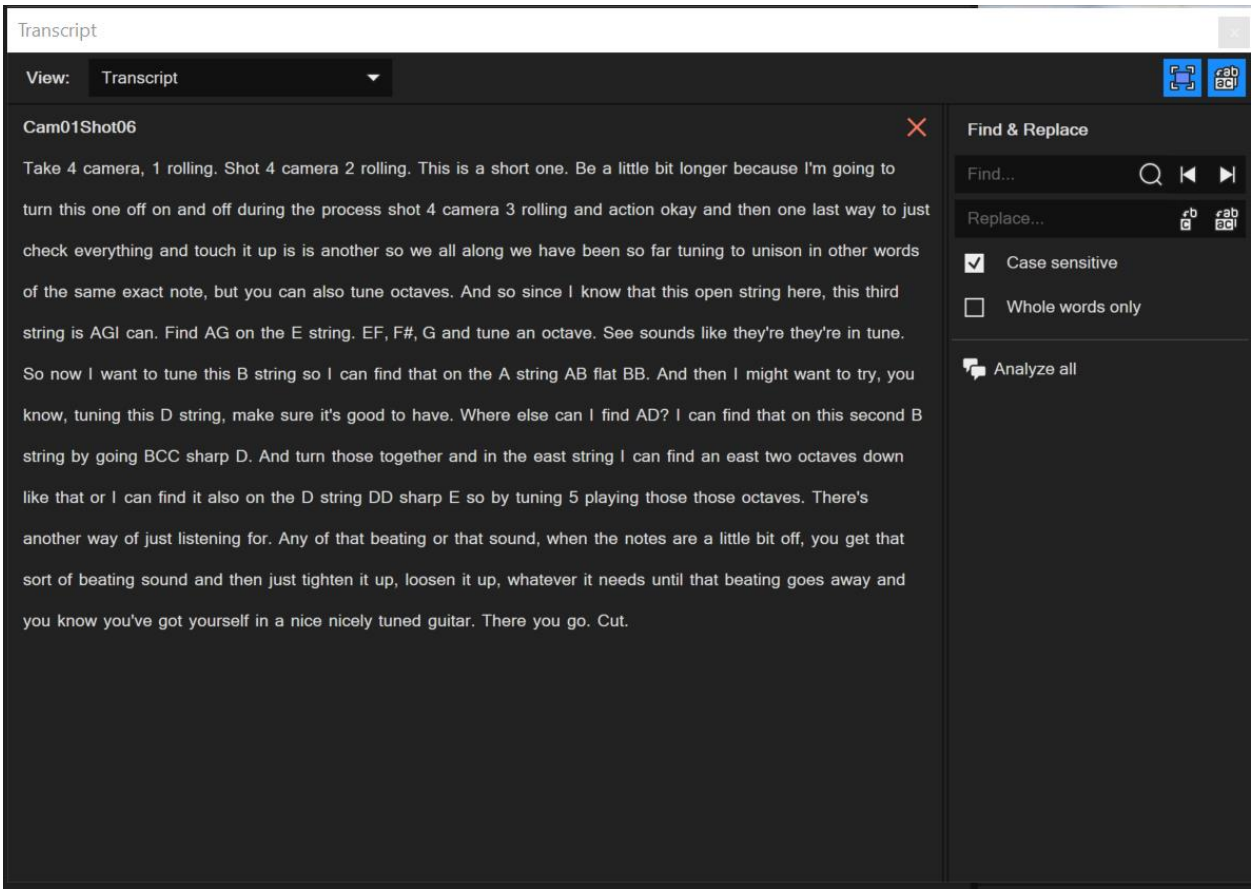
To use these features, first add a file to your timeline that includes dialogue, narration, or other speech. You can also try the feature with music. Depending upon the type of music and how "out front" the vocals are, you may have good luck turning those vocals into text so you can then make, for example, a lyric video for your song.

With the file on the timeline, choose **Tools | AI Speech to Text** to open the Speech to Text window. The window lists all of the audio events in your project. If you have many audio events in your project, you may have more listed here than you need or want. To see just the event you want, click it in the timeline to select it. Click the **Show Selected Events** button. Now only the event (or events if you've selected more than one) appears in the list.

If the event on your timeline holds only a portion of the dialog, but you want a transcript of the whole filed, select **Source Media** from the **Analysis Target** drop-down list. For now, leave this set to **Timeline Event** for the sake of this discussion.

This window has three view modes and it opens by default into the *Transcript* view, which you've been looking at thus far. To generate text from the audio file, first specify the language of the narration in the audio file from the **Language** drop-down list. In most cases, you'll likely be able to leave this set to *Auto detect*, but if you try that without success, specify your language from the drop-down list. Click the **Analyze** button.

The tool uses AI speech detection to process your audio. If you are analyzing a very long audio file, this could take a bit of time. When the tool completes the analysis, a transcript of the audio in your file appears in the window.


Transcript
View:
Transcript
Cam01Shot06
Take 4 camera, 1 rolling. Shot 4 camera 2 rolling. This is a short one. Be a little bit longer because I'm going to turn this one off on and off during the process shot 4 camera 3 rolling and action okay and then one last way to just check everything and touch it up is is another so we all along we have been so far tuning to unison in other words of the same exact note, but you can also tune octaves. And so since I know that this open string here, this third string is AGI can. Find AG on the E string. EF, F#, G and tune an octave. See sounds like they're they're in tune. So now I want to tune this B string so I can find that on the A string AB flat BB. And then I might want to try, you know, tuning this D string, make sure it's good to have. Where else can I find AD? I can find that on this second B string by going BCC sharp D. And turn those together and in the east string I can find an east two octaves down like that or I can find it also on the D string DD sharp E so by tuning 5 playing those those octaves. There's another way of just listening for. Any of that beating or that sound, when the notes are a little bit off, you get that sort of beating sound and then just tighten it up, loosen it up, whatever it needs until that beating goes away and you know you've got yourself in a nice nicely tuned guitar. There you go. Cut.
Find & Replace
Find...
Replace...
Case sensitive
Whole words only
Analyze all

Since AI is not perfect, your transcript may also not be perfect. If you find mistakes in the copy, you could edit the transcript now to correct them. However, such corrections as minor typos and so forth will likely not improve your text-based-editing experience. In fact, if you spend time editing your transcript now and later delete the portion of the video that contains that corrected text, you'll have spent time unnecessarily correcting things you didn't use. For that reason, you will probably achieve better results if you leave those mistakes in the transcript for now.

If you decide to create subtitles from this text later, it will be easier to correct any mistakes once the subtitles have been generated. And you will only spend time editing text you actually use. Minor instances of inaccurately analyzed text will have no bearing on the text-based editing operation so you don't need to worry about them for that use.

One exception to this might be if you notice a consistent and repeating mistake in the transcription. For instance, say your video is an interview with a man with the first name Reid. And further, let's say that the transcription consistently spells the name as *reed*. If you're going to create subtitles later, you need to correct this misspelling. You can search for the incorrect spelling and replace it.

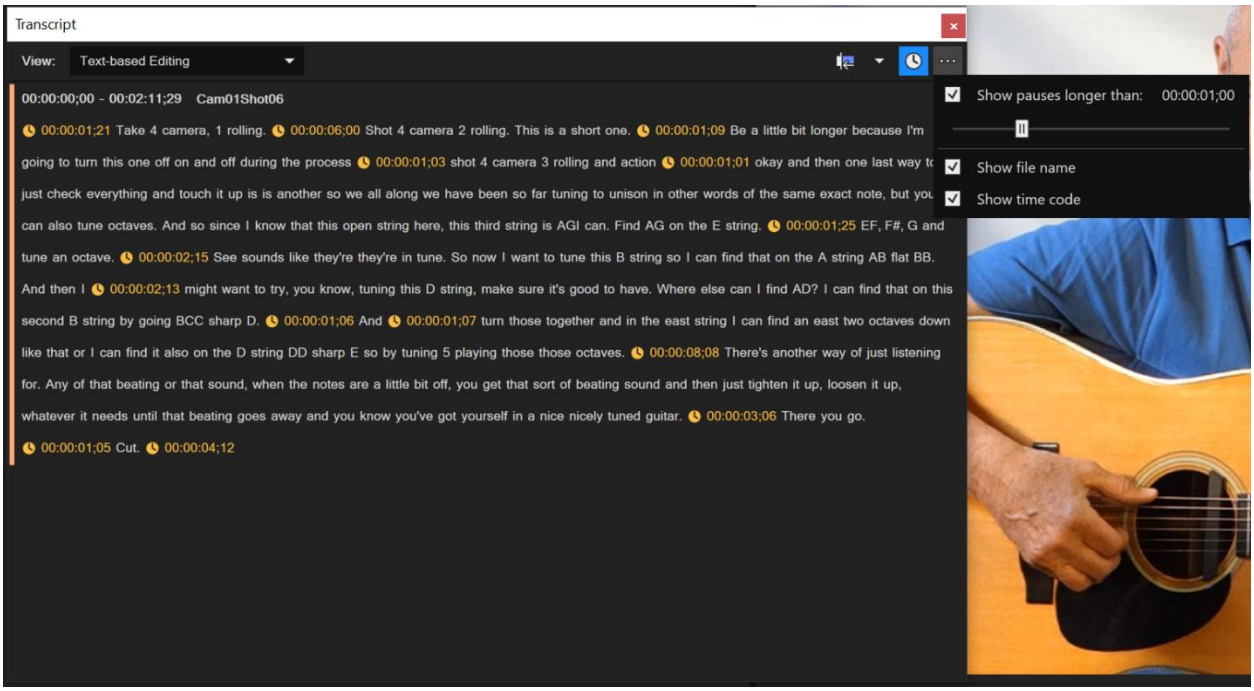
First, type the word you want to search for (in our example, type *reed*) into the **Find** text field. All instances of the word are highlighted in red in the transcript except for the first one, which is highlighted in white text. Type the word you want to replace the text with (in our case, *Reid*) into the **Replace** text box.

Now, click the **Replace this Occurrence** button to replace just the white-highlighted text. Click the **Replace all Occurrences** button to replace the word in every case. If you're replacing the text one occurrence at a time, click the **Previous Occurrence** or **Next Occurrence** buttons to navigate to and select the occurrence you want to replace next. Click the appropriate **Clear** button to clear the text field.

Once you have your transcript, you can create subtitles and use the text-based editing feature. It's best to get all your editing done first and save subtitle creation for last, so again you're working only with the material that makes it into your final cut. Therefore, choose **Text-based Editing** from the **View** list.

In the Text-based Editing view, you once again see your transcript, but it looks a bit different. Yellow text shows you where the audio file has pauses and the length of each pause. Click the **Show Pauses** button to toggle these pause readouts off and on. For now, leave them on.

Click the **More** button. Adjust the **Show pauses longer than** slider to specify a length threshold for the pauses you want indicated in the text view. You can also choose to hide or show your file names and the event timecodes from this menu.


Transcript
View: Text-based Editing
00:00:00;00 - 00:02:11;29 Cam01Shot06
00:00:01;21 Take 4 camera, 1 rolling. 00:00:06;00 Shot 4 camera 2 rolling. This is a short one. 00:00:01;09 Be a little bit longer because I'm
going to turn this one off on and off during the process 00:00:01;03 shot 4 camera 3 rolling and action 00:00:01;01 okay and then one last way t
just check everything and touch it up is is another so we all along we have been so far tuning to unison in other words of the same exact note, but you
can also tune octaves. And so since I know that this open string here, this third string is AGI can. Find AG on the E string. 00:00:01;25 EF, F#, G and
tune an octave. 00:00:02;15 See sounds like they're they're in tune. So now I want to tune this B string so I can find that on the A string AB flat BB.
And then I 00:00:02;13 might want to try, you know, tuning this D string, make sure it's good to have. Where else can I find AD? I can find that on this
second B string by going BCC sharp D. 00:00:01;06 And 00:00:01;07 turn those together and in the east string I can find an east two octaves down
like that or I can find it also on the D string DD sharp E so by tuning 5 playing those those octaves. 00:00:08;08 There's another way of just listening
for. Any of that beating or that sound, when the notes are a little bit off, you get that sort of beating sound and then just tighten it up, loosen it up,
whatever it needs until that beating goes away and you know you've got yourself in a nice nicely tuned guitar. 00:00:03;06 There you go.
00:00:01;05 Cut. 00:00:04;12
Show pauses longer than: 00:00:01;00
Show file name
Show time code

Once you have your Text-based editing view set up as you like it, you can start editing your project. The beauty of this feature is that you can edit your timeline simply by editing the transcript in Text-based Editing view. For instance, say you want to edit out the last sentence of the narration from your project. Instead of making the edit on the timeline where you need to listen and note exactly where the sentence begins and ends, you can simply delete the text from the Text-based editing window.

Click the first word of the sentence. This highlights that word. Notice that in your project timeline, the playback cursor also moves to the waveform for the audio you've selected. Now, hold the **Shift** key and click the last word of the sentence. This selects the first word, the last word, and everything in between. It also makes a timeline selection. For another method to select text, drag your mouse across the text. You see a light grey highlight over the word you're pointing to. Now, hold the left mouse button as you

drag. A blue highlight indicates that you've selected the word you're pointing to. Finally, hold the **Shift** key as you drag over the text with the left mouse button down. This selects every word you point to and simultaneously, the corresponding section of time on your timeline.

Use any of these techniques to select the text you want to delete. Press the **Delete** key. This deletes the selected text from the transcript, while also deleting the portion of the audio event on your timeline that the text was generated from. You can quickly go through your text with this technique and delete portions you don't want.

If you've deleted something and later decide that you want it back, trim the timeline event to bring it back to the timeline. The text automatically updates to reflect the edit you've made. This demonstrates that you can edit the text and see the changes on the timeline or edit the timeline and see the changes to the text. This is a powerful and fast way to work.

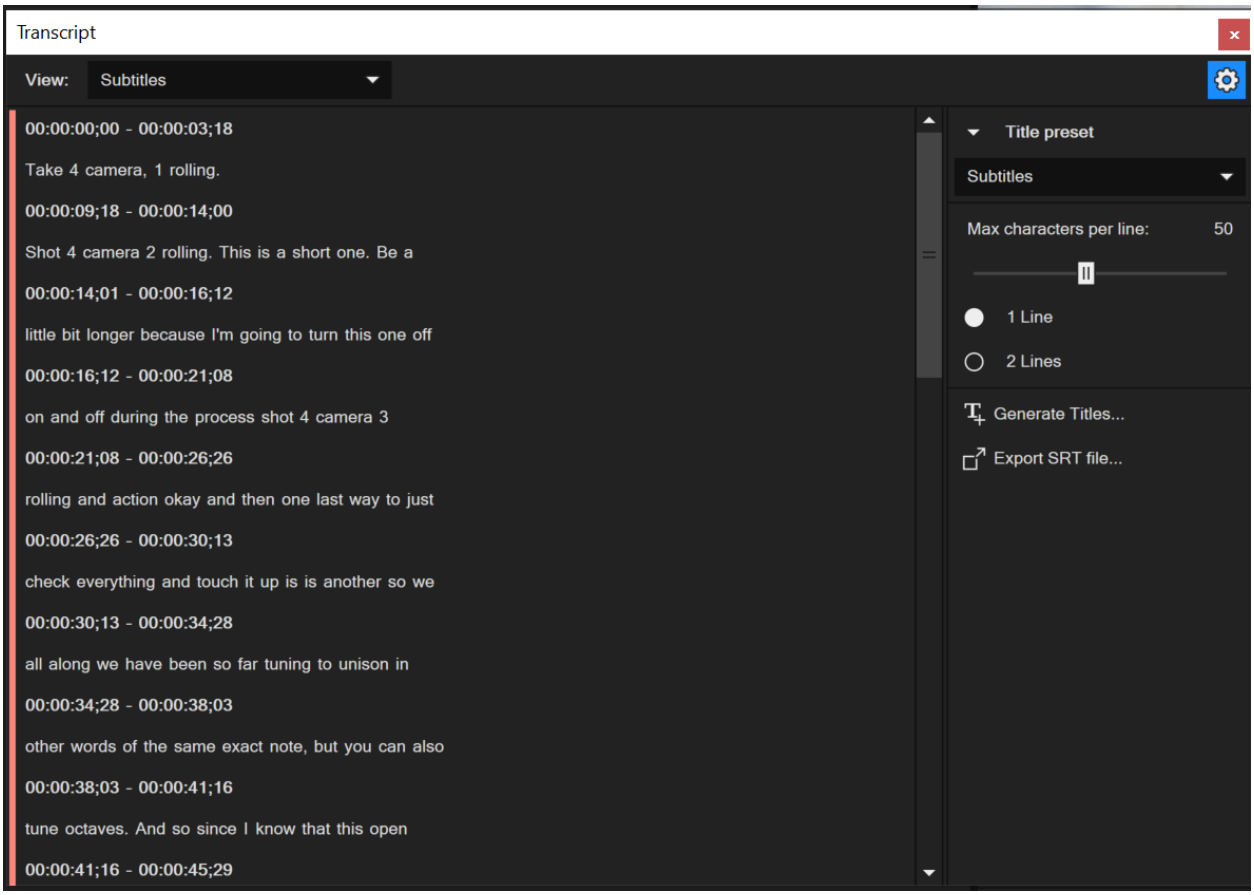
You can also control your Auto Ripple settings from the Text-based editing window. Click the **Auto Ripple** button to toggle auto ripple on and off and click the **Auto Ripple** drop-down arrow to choose the auto ripple mode you want from the list. Leave Auto Ripple off for now.

You can also edit text from the middle of your transcript in the same way. To see this, highlight a sentence from the middle of your transcript. Press the **Delete** key. This removes the text and creates a hole in the timeline where it has deleted the corresponding portion of your original event (assuming you turned auto ripple off). You now have two events in the timeline, and the text for those events is listed separately in the Text-based editing window set off by the timecode and file names if you've chosen to view those.

You can also cut, copy, and paste text to rearrange your video sequence. To do so, select a word or a range of words in the text-based editing transcript. Right-click the selected material and choose **Cut** from the context menu. Move to a different part of the text, right-click, and choose **Paste** from the context menu. This pastes the text into the new location and makes the appropriate corresponding edit on the timeline. Note the other options in the right-click context menu.

Choose **Split** to create splits in your timeline clip event without deleting any material. Choose **Delete** to delete the selected material. Finally, choose **Select Paragraph** to quickly select the entire paragraph that contains the selected text.

Once you're done with all your edits (using either the timeline or the Text-based editing window), you're ready to generate subtitles. Choose *Subtitles* from the **View** drop-down list. VEGAS Pro has already broken your transcript up into subtitles of reasonable length. These are listed along with the timecode of when the subtitle appears and disappears. Any edits you made in the transcript and Text-based editing view also appear here in subtitles view.


Transcript
View:
Subtitles
00:00:00;00 - 00:00:03;18
Take 4 camera, 1 rolling.
00:00:09;18 - 00:00:14;00
Shot 4 camera 2 rolling. This is a short one. Be a
00:00:14;01 - 00:00:16;12
little bit longer because I'm going to turn this one off
00:00:16;12 - 00:00:21;08
on and off during the process shot 4 camera 3
00:00:21;08 - 00:00:26;26
rolling and action okay and then one last way to just
00:00:26;26 - 00:00:30;13
check everything and touch it up is is another so we
00:00:30;13 - 00:00:34;28
all along we have been so far tuning to unison in
00:00:34;28 - 00:00:38;03
other words of the same exact note, but you can also
00:00:38;03 - 00:00:41;16
tune octaves. And so since I know that this open
00:00:41;16 - 00:00:45;29
Title preset
Subtitles
Max characters per line:
50
1 Line
2 Lines
Generate Titles...
Export SRT file...

On the right, you can control the look of your subtitles. The *Subtitles* text preset has been chosen by default, but you can use the drop-down to choose any other preset. If you've previously created a custom preset for your subtitles, it will appear in this list. Choose it from the list to apply it to your subtitles. For this discussion, we'll leave it set to the *Subtitles* preset.

Use the **Max characters per line** slider to set the length of your subtitle lines. Select the appropriate radio button depending upon whether you want one-line or two-line subtitles. With all of these settings in place, click the **Generate Titles** button. VEGAS Pro creates a new track in your timeline and labels it *Subtitles from Speech*. The new track contains generated text events that hold the subtitles. As with any text event, you can edit them individually if you need to make any changes.

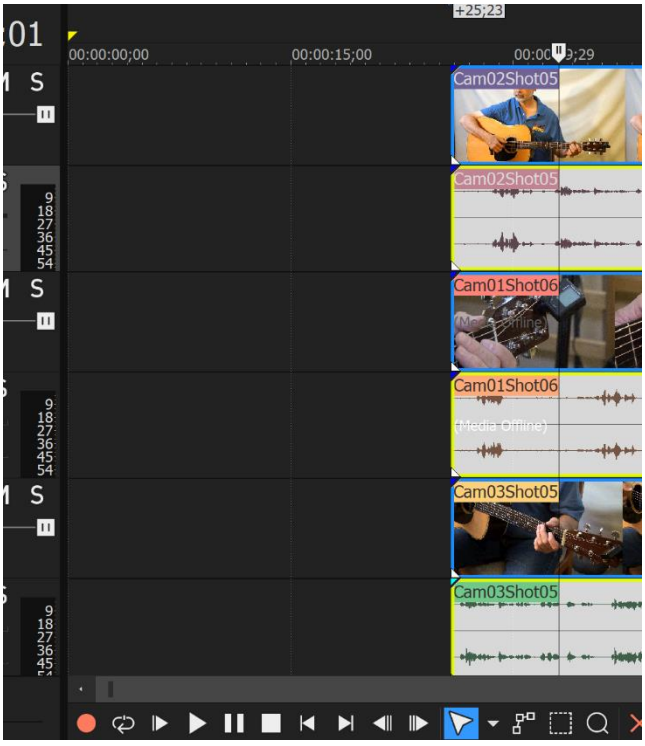
When you're finished, click the **Close** button to close the Transcript window.

New Multicam Audio Sync

Synchronizing multicam events based on the audio from the clips the events hold has been completely reworked. You can now select multiple events and quickly synchronize them with options optimized for the type of audio contained in the clips.

To synchronize files based on the audio (and they can be audio-only files, video files with audio, or a mix) first add each file to separate tracks so each now sits on a different track than each of the others. Of course, for synchronization to work, the files must have been recorded simultaneously so that they contain exactly the same source audio. It's best if none of the files starts at the very beginning of the timeline.

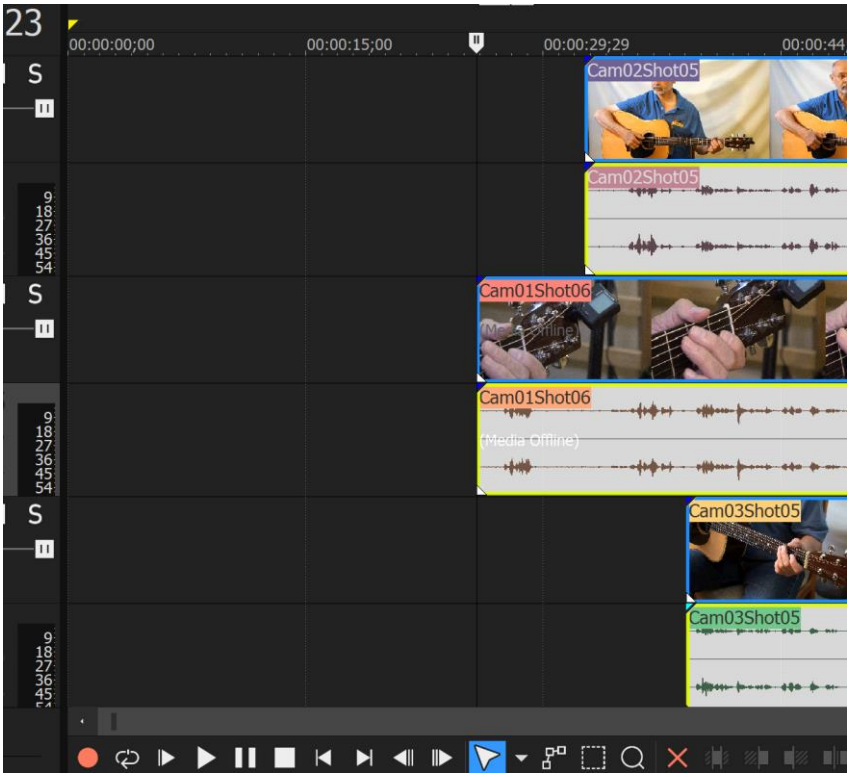
The synchronization process will move timeline clip events as necessary to line the audio of each file and any of the events may need to move earlier or later on the timeline. If one of your events needs to move toward the start of the timeline, but it's already sitting at the very beginning, the synchronization will fail since the event can't move any further to the left. Give yourself some space between the start of the project and the start of the events on your timeline.



Click the audio event that you consider to be the "target" event, that is, the event you want to match the others to. This event will not move, and each of the other events will move to accomplish the synchronization. Now, hold the **Ctrl** key while you click on each other audio event that you want to synchronize. As you see in the image above, each of the audio events has been selected (indicated by the yellow highlight) while their grouped video events have not been (indicated by the blue highlight).

Now choose **Tools | Multicamera**. Depending upon the audio material in your files, select the most appropriate of the synchronization options at the top of the cascading menu. For instance, my file contains both speaking and music, so I choose **Synchronize Mixed Audio to Align Events**. VEGAS Pro

analyzes your audio files and moves repositions the events as needed to synchronize them. If the first synchronization type you use doesn't give you results that you're happy with, undo the edit and try a different type.



Once the events are synchronized, you can enter Multicamera editing mode and edit your project.

AI Auto Reframe

This AI-assisted tool automatically reframes your video when the delivery size of your final render does not match the original aspect ratio. For instance, if you have a standard widescreen video and need to deliver it in a square format for Instagram or other channels, this tool shifts focus to the most important object in the video and keeps it centered in the new frame size while other material is cropped out.

Before you get started, you may want to save a copy of your project and work on the copy. Later in this process you'll need to change the aspect ratio of the project to the new aspect ratio, and you will likely want to keep the original project in its full version. So, it makes good sense to work on a copy of your project.

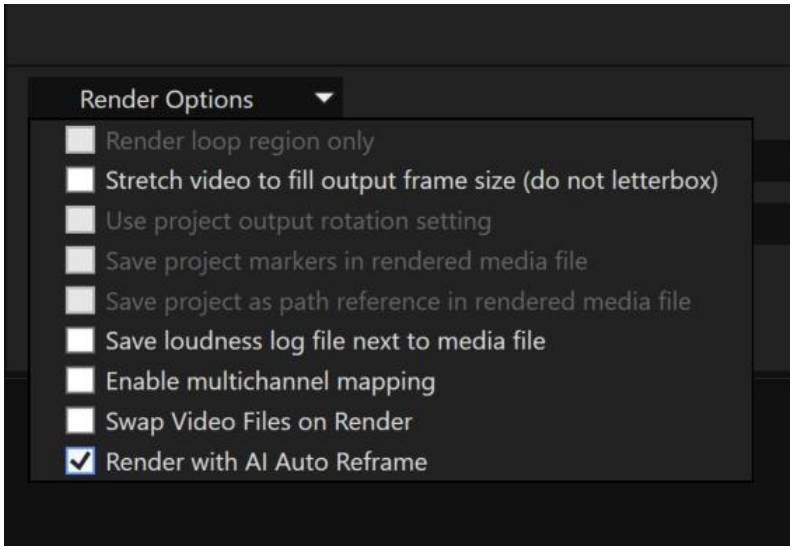
There are a couple of different approaches to using this tool. In the first, you'll engage the feature during the render process and let the AI make all the cropping/panning decisions. This can work for quick delivery, but as usual, the AI doesn't always make perfect decisions. Therefore, you can also apply the tool as a video effect and take more manual control of the results. We'll look at both techniques.

First, open or create a standard 16:9 HD project that you can experiment with. To see this well, you might try to use a project where the main character or object is off center a bit or moving around in the frame slightly.

Choose **Project | Render As**. In the Render As dialog, choose **MAGIX AVC/AAC MP4** from the **Formats** list. The technique will work with any of the listed video formats. From the **Templates** list, select a delivery format that matches the properties of your file, as indicated by the *equal signs* before the names of the templates that match. Now, click the **Customize Template** button.

On the Video tab of the Custom Settings dialog box, choose **(Custom Frame Size)** from the **Frame size** drop-down list. Set both the **Width** and **Height** settings to the same value, say 1080 for a square final render. Click **OK**.

Back in the Render As dialog box, set your save location and give your file a name. From the **Render Options** drop-down list, select the **Render with AI Auto Reframe** checkbox. When you're ready, click the **Render** button.


Render Options
Render loop region only
Stretch video to fill output frame size (do not letterbox)
Use project output rotation setting
Save project markers in rendered media file
Save project as path reference in rendered media file
Save loudness log file next to media file
Enable multichannel mapping
Swap Video Files on Render
Render with AI Auto Reframe

Note that the render process will likely take longer than usual since the AI Auto Reframe tool will need to analyze the project to determine how to reframe it. With the render complete, view the resulting file and evaluate your results.

If you're not quite happy with the choices that the AI made, you can take more control of the process. Reopen the original project so that you're starting fresh. Choose **Tools | AI Auto Reframe**. It will take some time for the AI tool to analyze the video. With analysis complete, the Video Output FX box opens with the AI Auto Reframe tools activated.

Important note: this tool engages the *Sync Cursor* button automatically. Since this is a global setting, it affects many different tools. You may want to disengage it when you're done working with AI Auto Reframe.

It's important to understand that this process has added the AI Auto Reframe video effect to the Video Output bus which acts as sort of a master control area. It also adds the effect to each video event in your project, as indicated by the blue dot on the *Event FX* button on each event. This enables you to control the reframing for the entire project or event by event. You won't necessarily need to work with each event individually, but if you need to make corrections or tweaks, you can make those changes in a detailed way only where it's needed.

In the Video Output FX window, note that the *Add Reframing* button is not activated. The reframing has been added for you automatically. Click the **Remove Reframing** button and notice that the effect has been removed from every event in your project and the *Add Reframing* button is now active. Click the **Add Reframing** button to add the reframing plug-in back to each event.

The *Add Reframing* button also comes in handy if you've already run the reframing process and then add a new event to your timeline. In that case, the new event will not be affected by the reframing. To fix that problem, you first need to refresh the parameters of the Video Output FX window so that it recognizes that a new event exists. To do so, close the window. Click the **Video Output FX** button. Now, click the **Add Reframing** button to update your project and add the effect to the new event.

Click the **Show Preview for** drop-down arrow and choose **Portrait (9:16)** to preview the results of the reframing if you convert this project to a portrait render format. A highlight box in the Video Preview window shows what portion of your video frame will fall within the final render.

Click through your project timeline to check the results at various frames or play your project to see the whole thing. You'll most likely notice that your object of interest falls outside of the highlight box as it moves through the video frame. This is the most basic approach and basically matches what would happen if you rendered your project to this new format without AI Auto Reframing.

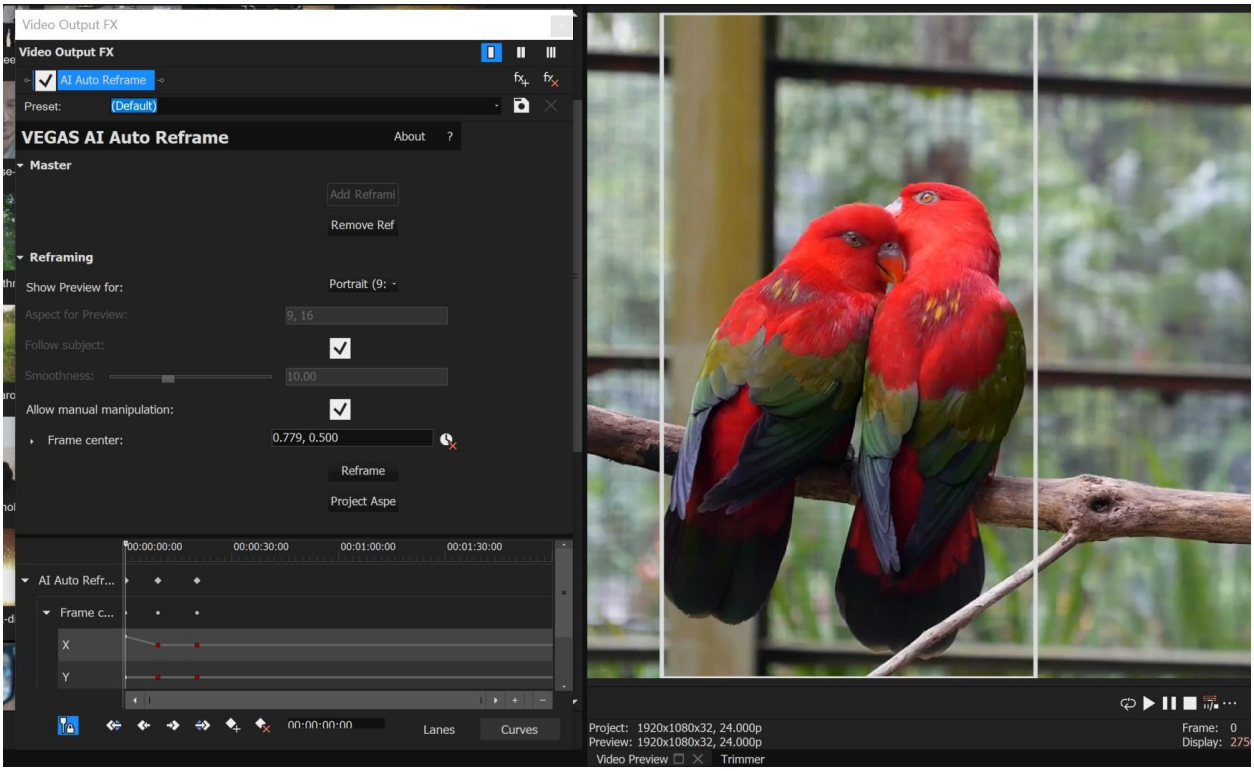
Experiment with the other options in the *Show Preview for* drop-down list. Notice that you have options for several common formats. If none of those matches your project, select Custom from the list and enter the dimensions of your target render size in the **Aspect for** Preview text box.

You might just get lucky and be happy with the reframing without any further work. But more likely, you'll find problems that need to be fixed. If you see that the subject of your video leaves the preview frame, select the **Follow Subject** checkbox. Now when you preview your project, the position box moves to follow along with the object that the AI has determined is the focal point of the video.

Adjust the **Smoothness** slider to control the position box's movement in reaction to a moving object. A low Smoothness setting sets the position box to move as needed to keep it around the target object as consistently as possible. If the object is moving quickly, very low settings could result in "jerky" or "jumpy" box movement which might be distracting. A high Smoothness setting prioritizes the evenness of box movement over keeping the object fully within the box. This might result in the object partially leaving the frame of the position box if it moves too quickly for the box to keep up. Find a setting that gives you the most appropriate compromise between these two extremes for your project.

This result basically matches the result of selecting the *Render with AI Auto Reframe* checkbox that we discussed earlier. But now you can correct any mistakes you feel the AI has made. You can manually correct any mistakes you see.

Select the **Allow manual manipulation** checkbox. Now place your timeline cursor on the video frame where you feel the position box is wrong. Point to the position frame in the Video Preview window. The *hand* mouse icon indicates that you can move the box. Drag it so that it now includes the object you want in the frame.



This creates a new keyframe in the animation timeline. Continue repositioning the box as necessary to ensure the object of interest is always in frame. While you could do this frame by frame, you may not need to spend the time to do so. Start with correcting the position at regular intervals (e.g., every five seconds). New keyframes will be added for each correction and the position of the box will animate from one keyframe to the next. If the interval between keyframes doesn't work in every case, click between two keyframes and make another correction. Try adding as few keyframes as possible to keep your project a bit simpler, but include as many as you need to achieve results you're happy with.

If you'd like to revert to the AI determining the center point of the position box, click the **Reframe** button. This overrides manual settings. Note that if you click the *Reframe* button while in the Video Output FX window, manual settings will be reset for all events in your project that have reframing applied to them. In other words, this is a global action. To reset the manual settings for just one specific event, click that event's **Event FX** button and click the **Reframe** button. Now only that specific event is reset.

Once you're satisfied with the reframing, click the **Project Aspect Ratio** button. This changes the project properties of your project to match the aspect ratio that you set back up in the *Show Preview for* drop-down list earlier. You may want to save this project with a different name in case you want to return to it later. If you don't need to save it for later, you can return the project to its original properties. Choose **File | Properties** and set the **Width** and **Height** settings as you want them.

Before you leave this tool, consider the state of the Sync Cursor feature. If you want to disengage that function, click the **Sync Cursor to Media Timeline** button. Of course, you can leave that function engaged if you want to.

Now you can render the project as normal to the target file aspect ratio. There is no need to select the *Render with AI Auto Reframe* at this point.

AI Dehaze z

@Ale

This AI-assisted plug-in analyzes your video for hazy elements like smoke, fog, smog and so on and removes those elements in order to create a more crisp, clearer image of your main video element.

To see how this works, find a clip that has fog, smoke, haze, or some similar problem that obscures the subject of the video and add it to a VEGAS Pro project.

Click the **Video FX** tab and select **AI Dehaze** from the list of effects. Drag the **Default** preset onto the timeline clip event that holds the hazy video. It may take a little while for the tool to analyze your video. With the analysis complete, you'll likely be able to see an immediate difference

Experiment with the three different settings in the **Details** drop-down list to see which one gives you the best results. Keep in mind that changing these settings can cause a reanalysis and that can take a bit of time.

Next click the **Artifact Reduction** arrow. In this section, increase the **Gain** to amplify the video's intensity and make the image brighter. Raise the **Offset** to try and bring more detail out in your video or lower it to "crush" the blacks a bit and make the detail in the dark areas less prominent. In this picture, I've set each of the Amount, Gain, and Offset sliders to their maximum value.

You can animate all these parameters with the standard animation techniques for OFX plug-ins in VEGAS Pro and change the look of your video over time.

AI Sharpen

Driven by AI, the AI Sharpen tool analyzes the edges of objects in your video and enhances them to give the image a crisper, clearer lock. The enhancement can be used to improve your video's clarity or in many cases as a special effect to give your video an unnaturally crisp look.

Add a clip to your timeline. To see the results clearly, it can help to experiment with a video that has many fine lines, like hair or the fur of an animal. Click the Video FX tab and select **AI Sharpen** from the list. Drag the **Default** plug-in onto the timeline clip event.

It will take the AI some time to analyze your video. With analysis complete, you might instantly see the results. To make them more obvious, increase the **Amount** slider to *1.00*, the maximum value. You'd probably never really use that much, but it will help you see the results more clearly. In this split-screen view you can see on the left the original image and on the right the image with the maximum sharpness applied to it. Compare the animal's fur and the wrinkles on its face. Notice how the sharpened eye looks crisper and clearer.

Compare the different settings under the **Details** drop-down to see which works best for your video. Note again that it can take some time for the AI to analyze your video before you see the results.

AI Smoothen

You can use this AI-driven tool to soften small details in your video while preserving sharp edges. This can result in a cleaner, more stylized look where fine details are smoothed out, but edges remain clear. You can use a small amount to give your video a subtly softer appearance, or a large amount to create more of a special effect on your video.

Add a clip to your project. To see the results more effectively, try to find something with a lot of fine detail, like the hair or the fur of an animal.

Click the **Video FX** tab and from the list of effects, choose **AI Smoothen**. Drag the **Default** preset onto your timeline clip event.

It takes the AI a bit of time to analyze your video. With the analysis complete, raise the Amount slider to 1.00 for maximum smoothing. Notice that fine details are reduced while edges remain sharp. At this extreme value, your video can take on an unnatural, somewhat stylized appearance.

In the following image, you see a split-screen view with the original video on the left and the smoothened video on the right with the Amount value maximized. Notice how much of the fine detail is gone from the right half.

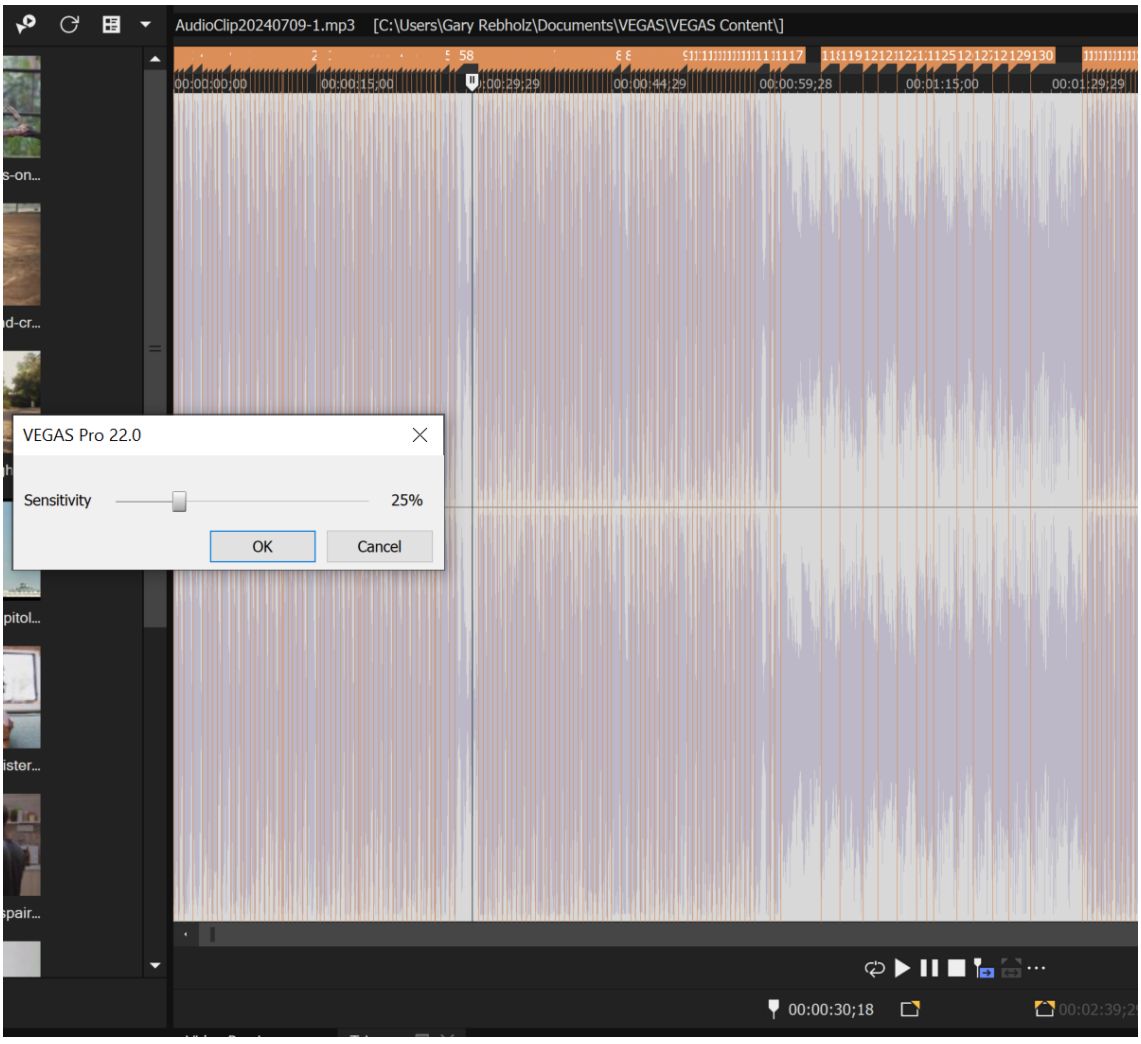
Experiment with the options in the **Details** drop-down list to see which one works best for you. Keep in mind that it may take a bit of time for the AI to process the different settings.

Beat Detection

Beat Detection analyzes an audio file (or audio in a video file) and identifies unusual energy in the low-mid and low-end of the audio frequency range. This type of energy often corresponds to a significant "hit point" in the video where an edit might make sense. Embedded markers serve as snap objects for identification and editing in sync with these hit points.

To use the Beat Detection tool, add a music file to your timeline. This can be a stand-alone audio file, or a video file with music in the audio portion. Remember, the tool also works on non-music files, but for this discussion we'll use a music file. Right-click the timeline clip event that holds the music file and choose **Beat Detection** from the menu. The media file opens in the Trimmer window along with a *Sensitivity* dialog box.

You can see in the Trimmer that markers have been added. You may see an overwhelming number of markers and if that's the case, adjust the **Sensitivity** slider to control the number of markers. Raise the Sensitivity amount to see fewer markers. The tool attempts to detect important hit points in your audio, and once you've found the sensitivity that you find useful, click **OK**.



Note that you can also access Beat Detection directly from the Trimmer window, and you can add a Beat Detection button to the Trimmer toolbar. To see this, with a file loaded into the Trimmer, click the **More Buttons** button. To run Beat Detection, choose **Beat Detection** from the menu. To add a button to the Trimmer toolbar, choose **Edit Visible Button Set** from the list and select the **Beat Detection** checkbox then click **OK**.

Notice in the timeline, that the markers added in the Trimmer window now appear in the timeline clip event that holds the file. These markers can be used as snap objects. Trim one of the edges of the timeline clip event and notice that it snaps to these markers. If you have events on other tracks in your project, they will also snap to these markers. This makes the marker a valuable tool for when you want to edit to significant points in the music.

Note that these markers are not automatically saved with the media file. If you close the Trimmer and start a new project, then add the same file to your new project, the new event will not show markers. However, you can save the markers if you know you'll use the file in a different project and don't want to have to run beat detection again. To save the markers, in the Trimmer window, click the **More Buttons** button and from the list of buttons select **Save Markers/Regions**. If the file type of the media you're using supports it, VEGAS Pro embeds the marker metadata into the file itself. If the file type does not support this metadata, VEGAS Pro creates "sidecar" file that holds the metadata.

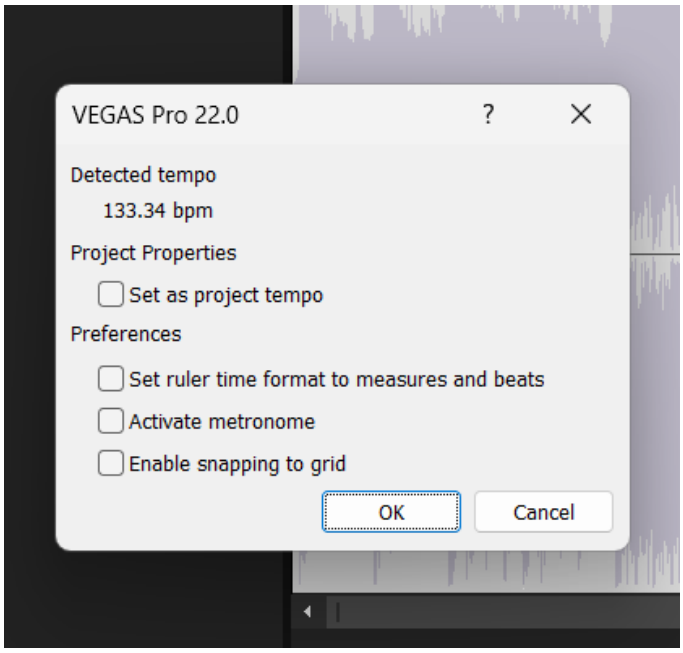
One last note about the Beat Detection tool. Although one of the most logical use cases will be as we've described here with a music file, the tool works on any audio file. So, for instance, you might find it useful to locate and identify significant moments in the audio of a video file, like a door slam or an explosion. Since the tools analyze the mid- to low-frequency audio spectrum, it will detect and mark any audio that provides extra energy in those frequency ranges. Experiment with different types of audio to see where you find it helpful.

Tempo Detection

The Tempo Detection tool analyzes a piece of music (or the music in a video file) to determine the tempo of the piece and automatically sets your project properties to match the detected tempo. This makes editing the project easy, as you can now set your timeline ruler to measures and beats and use the grid as orientation and snap points for seamless cuts and edits in time with the music.

To detect the tempo of the music in a file, add the file to your project timeline (note: you can also add it to your Project Media list without adding it to your timeline in case you want to establish the tempo but don't want the file in your timeline at this point.) Click the **Project Media** tab to bring that window forward. Right-click the file in the Project Media list and choose **Tempo Detection** from the list.

The Tempo Detection dialog box opens and lists the tempo that has been detected for your file. You also see several options for project properties and application preferences. These options can set you up to easily take advantage of this new tempo information as you edit your project. Especially if you intend to cut to the beat of the music. Let's proceed as if that's exactly what you want to do.



The options here are fairly self-explanatory, but let's go over them quickly. First, to set your project tempo to match the tempo that's been detected, select the **Set as project tempo** checkbox. Select the **Set ruler time format to measures and beats**. This will change your ruler bar from the default setting Of SMPTE Drop (29.97 fps, Video) to showing you measures and beats. Next, decide whether you want to hear the metronome counting out the beats as you play the project. For now, leave the **Activate metronome** checkbox deselected so that the metronome will not sound on playback. Finally, to make it easy to edit at precise measures and beats, select the **Enable snapping to grid** checkbox. When you've made your selections, click **OK**.

Next, choose **File | Properties** and in the Properties dialog box, click the **Ruler** tab. You can see here that the project tempo has been set to match the tempo that had been detected. Click **Cancel** to close the Properties dialog box.

Next, notice that your timeline ruler bar now lists measures and beats instead of frames. Trim the end of the timeline clip event. Notice that the grid markers now act as snap points. By default, the grid shows up only at the first beat of each measure. If you want finer grid details, choose **Options | Grid Spacing** and from the cascading menu, choose the beat resolution you want. For example, if you want a grid line at every beat of each measure, choose **Quarter Notes** from the cascading menu.

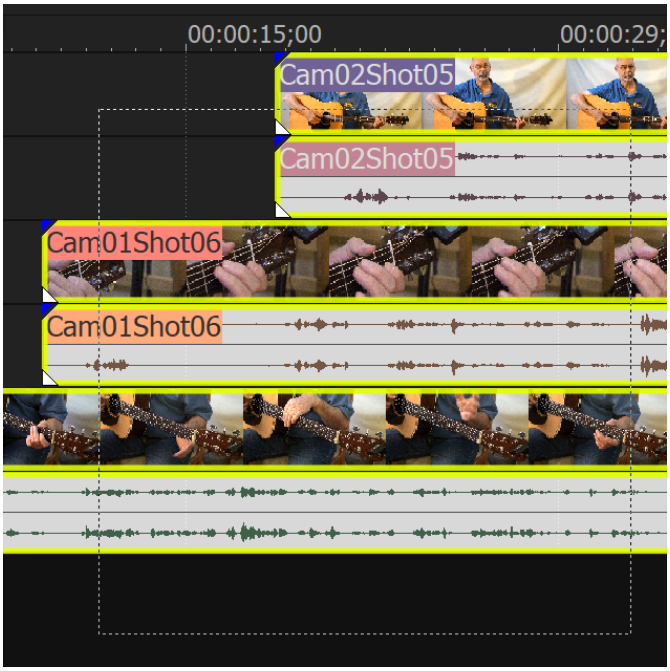
Before you start editing, you need to ensure that the first beat of your file lines up with beat 1 in the ruler bar. For instance, say you want the music to start at beat 1.1 of the timeline ruler. That's at the very beginning of your timeline, and if the music in your event doesn't start at the very beginning of the event, your music won't line up with the ruler. In this case, trim the start of your event so that it starts exactly at the first beat of the music.

If you can't trim that part of your event off for some reason (for instance, maybe the music actually starts a beat or two before the actual first beat of the music—known as a musical *pick-up)* click to place your cursor directly on the waveform for the first beat of the music. (If you have to, choose **Options | Quantize to Frames | Enable Quantize to Frames** to turn that option off. Then place your cursor. But remember to turn the option back on so you don't cause yourself problems later!) Now, right-click the Timeline Ruler and choose **Set Time at Cursor** from the menu. Type *1.1* into the text field and press **Enter**. Now your ruler shows measure 1, beat 1 at the cursor location and shows negative time before that location. Your ruler now lines up with your beats and you can edit with confidence that you are editing to important beats in the music.

Timeline Selection improvements

The timeline selection techniques have been refined to make selecting events even easier. An intuitive left-click on an empty timeline space now enables you to start a selection rectangle which you can modify in order to select whichever events you want.

To use the new functionality, open or create a project with several events across several tracks. Point your mouse to an empty area of the timeline. Now, with the left mouse button, drag to create a selection rectangle around the events you want to select.



This is new behavior for this left-mouse drag. Previously instead of accessing the Selection tool as it does now, this action would have created a time selection in the timeline. You can still access that function. To do so, instead of the left mouse button, drag through the timeline with the right mouse button. Now you create a time selection.

This new left-mouse-button behavior fully accesses the Selection Edit tool with all of its functionality. This means that you can change selection states while making your selection, just as you can when you use the Selection Edit tool specifically.

To see this, make another selection with the left button, but don't release the button just yet. With the left mouse button still down (so you're still in selection mode), click the right mouse button. This constrains the selection box so that you can only adjust the width of the box. Use this mode if you want to ensure that you select events within a specific range horizontally on all tracks in your project (even if you can't currently see them).

With the left button still down, click the right button again. Now you can only adjust the height of the selection box. Use this mode if you want to select everything on each track within the height of your selection box (again, regardless of whether you can see what's on the tracks or not).

Finally, click the right button again to toggle back to free-form mode where you can define both the width and height of the selection box.

If you've gotten used to the old behavior of the left button and you miss being able to use it to make time selections, choose **Options | Preferences** and in the Preferences dialog box, click the **Editing** tab. Now select the **Use the Right mouse button to switch to the Selection Edit Tool** checkbox. Click **OK**. Now use the right button to switch to the Selection Edit tool. Make sure to deselect the preference if you prefer the original left-button behavior.

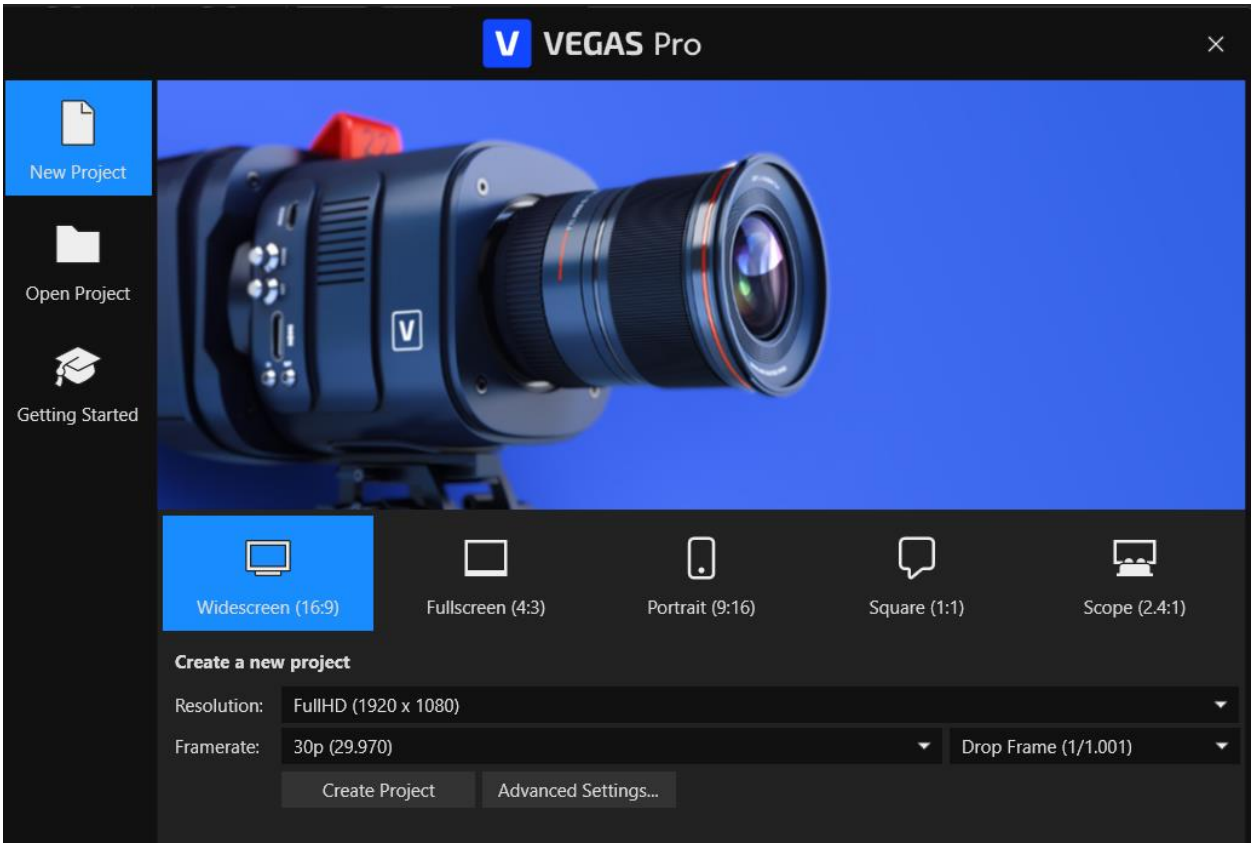
New Welcome Screen

https://help.staging.magix-hub.com/preview/video/vegas/22/en/content/topics/2-window/welcomescreen.htm

The Welcome screen has been completely redesigned to make it even more useful in helping you start your editing session. Three tabs give you quick access to new-project setup, previous projects, and materials to help you use VEGAS more effectively.

The Welcome screen pops open when you first start VEGAS Pro. If you've already closed it, choose **File | Welcome Screen** to open it now.

The default tab, the *New Project* tab, includes several options for the aspect ratio of the project you want to create. The default uses the typical HD project aspect ratio *Widescreen (16:9)*. To choose one of the other aspect ratios, click the button for the one you want.



Use the **Resolution** and **Framerate** drop-down lists to choose the settings you want and specify whether you want *Drop Frame* or *Full Frame* from the *Timecode Type* list.

When you've specified all your choices, click the **Create Project button** and VEGAS opens a new project according to your settings. If you need more control over your new project's properties, click the **Advanced Settings** button. This opens the full New Project dialog box (and closes the Welcome screen) where you can specify all the fine details of your new project.

Return to the Welcome screen if you don't still have it open. Click the **Open Project** tab. Here you see a list of your recent projects. To open one of them, click its name in the list. If you don't see the project you want to open in the Recent Projects list, click the **Browse** button. This opens the Open dialog box. Navigate your computer drives to find the project you want to open.

Back in the Welcome screen, click the **Getting Started** tab. Use the buttons across the bottom to access tutorials, online help, various VEGAS communities, and more. Once you've made your selection, click the button in the main content area to access the specific resource you want.

To prevent the Welcome screen from opening every time you start VEGAS Pro, deselect the **Show Welcome Screen on Startup** checkbox. To close the Welcome screen without using any of the settings you selected here, click the **Close** button. VEGAS still starts a new project, but uses the normal default settings.

If you've deselected the **Show Welcome Screen on Startup** checkbox and now decide you would like the screen to open all the time after all, choose **Options | Preferences** to open the Preferences dialog box. On the *General* tab, select the **Always show Welcome Screen when program starts** checkbox and click **OK**.

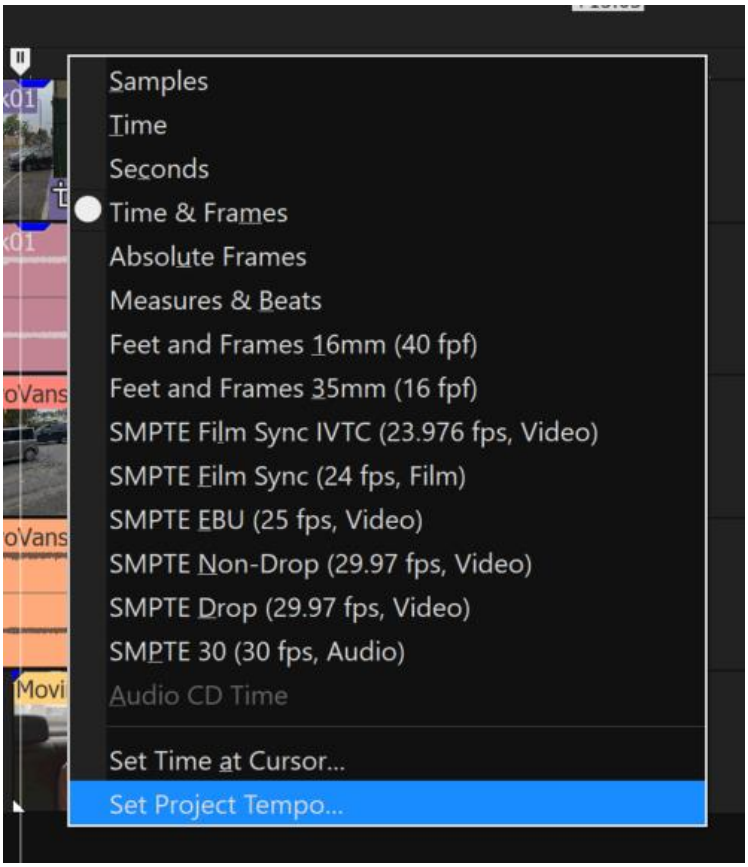
Set the project tempo

New menu options make it easy to set your project tempo. With these you can easily open the project audio properties and enter the desired tempo. When you then set your timeline ruler bar to Measures and Beats, the ruler will accurately reflect the project tempo. When you match the project tempo to the tempo of the music in your timeline, you can easily use the ruler to edit to precise measures and beats of the music.

You still set the project tempo through the Ruler tab of the Properties dialog box, so all the old ways to get there still work. In addition, now there are a couple more ways to make it easier to find and access.

First, choose **Options | Ruler Format** and then choose **Set Project Tempo** from the cascading menu. This opens the Properties dialog box. Enter your desired tempo into the **Beats per minute** text filed and click **OK**.

Next, right-click the timeline **Ruler** bar and choose **Set Project Tempo** from the context menu. Now you can specify the tempo again on the Ruler tab.



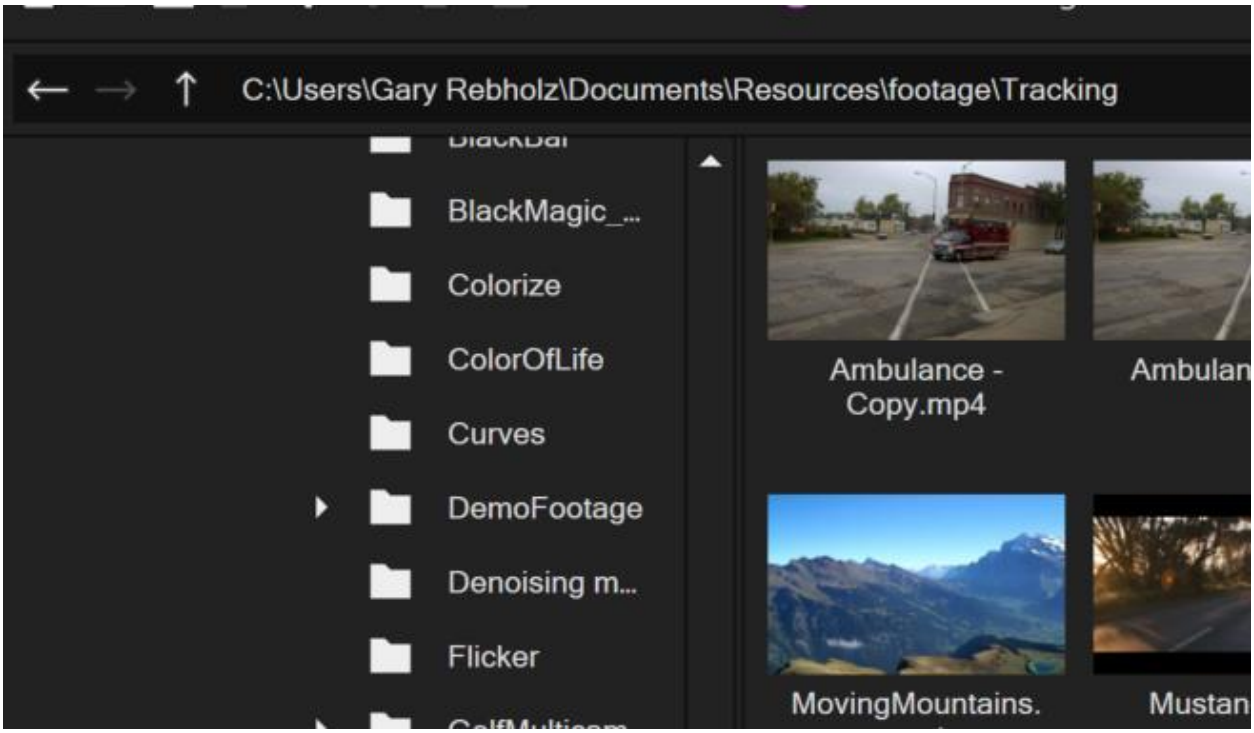
Explorer window redesign

The Explorer window has been reimagined and newly designed to provide a more efficient user experience. It's now easier to navigate to your media files, preview them, and organize your view.

The default window layout displays the Explorer window as the visible window in the docking area. If you've changed from the default, click the **Explorer** tab to bring the window to the front. If you don't see the Explorer tab in the docking area, check to see if you've moved it to a new position or a floating window. Make sure to check all your screens if you have a multiple-screen setup. If you previously closed the Explorer window, choose **View | Window | Explorer** to reopen it.

If this is the first time you've visited this window, the folder tree on the left is completely collapsed. If you've previously navigated your computer drives with this window, the window remembers the last location you navigated to. We'll proceed as if this is your first time here.

To navigate your computer drives in search of your media files, click the **drop-down** arrow to expand the folder tree view. You can either choose the folders you want to dig into from the tree view or double-click the folder in the content view on the right. Use either method to navigate to the location on your computer drives that hold the media you want to use.



While navigating through the folder tree, you can use familiar techniques and controls from Windows Explorer to get around. For instance, click the **Browse Back** button to go back to the previous folder in the chain. Click the **Browse Forward button** to go back the other direction. Click the **Move up one level** button to navigate to one level higher in the structure than where you currently are. Click any folder in the structure to navigate into it.

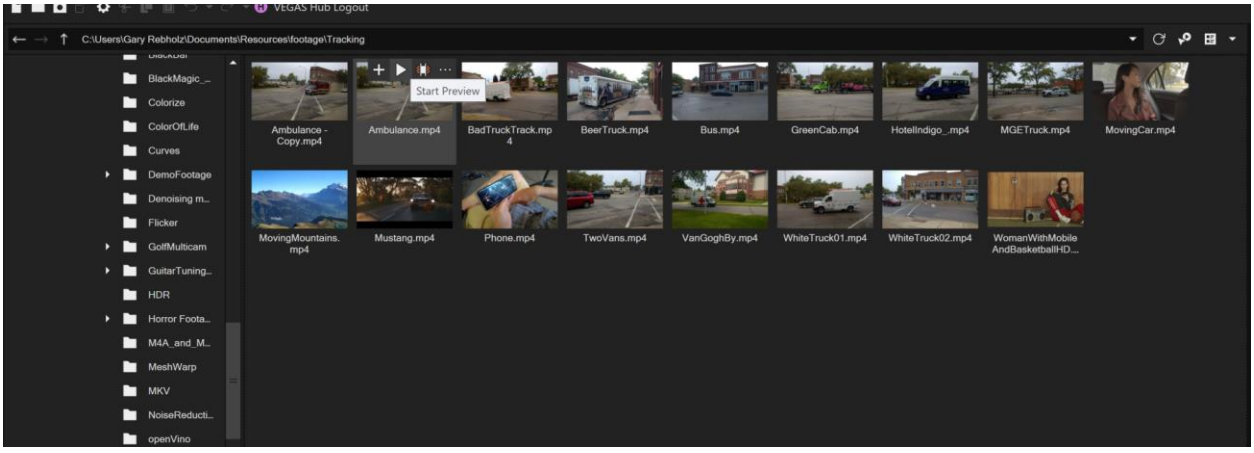
Right-click and folder or click the **More** button for a context menu of options. Be careful about selecting these options since the actions you take here are similar to taking the same action from Windows

Explorer. In other words, for example, select **Remove** from the context menu. A dialog box opens to ask you if you're sure you want to remove the file. If you click **Yes**, the file will be deleted not only from your view here in the Explorer window, but from its location on your computer drives. So, make sure you really want to delete the file before proceeding! For now, click the **No** button to preserve the file and close the dialog box.

By default, the Explorer window shows the files in each folder in thumbnail view. To access different views, click the **View** drop-down arrow. Choose **List** to see a simple list of the folder contents. Choose **Details** from the list. This presents the files in a list that contains a huge amount of useful details about the file's characteristics. Click the column headers to sort the list by that characteristic. Click it again to toggle the list order between ascending and descending order. When you're done experimenting, click the **Name** column header to sort by name. If the file names are listed in reverse alphabetical order, click the **Name** header again to switch to alphabetical order. Click **Thumbnails** from the **View** list to return to the default view.

You can also resize your thumbnails and access the other views with a shortcut. To resize the thumbnails, hold the **Ctrl** key as you roll your mouse button back and forth. When you pass the smallest thumbnail size, the view switches to Details mode. Go further and it switches to List mode. Roll the mouse wheel in the other direction and switch back to thumbnail view.

Once you've found the folder that contains the files you want, you have quick access to several actions you can perform with or on the file. Point to a video file. Several buttons appear at the top of the file's thumbnail. In List and Details view, these controls appear to the right of the icon. Point to each button one at a time to read the ToolTip that explains what the button does. You can see that you can use these controls to add the file to the timeline, preview the file, add it to the Trimmer, and more.



As with the old Explorer window, you can enter auto-preview mode. To do so, click the **Auto Preview** button. If you've made changes to the folder contents or structure outside of VEGAS Pro using Windows Explorer, click the **Refresh** button to update your Explorer window so you can see the content you added or other changes you made.

Adding your media to the timeline with mouse drags works the same way it always has. Drag with the **Left** mouse button to simply add the file directly to the timeline. Drag with the **Right** mouse button to

invoke a context menu of option for how you would like to add the file. Select your preference from the context menu.